

Read
egit
chlorid
Plymsh
line C
1013-1
system
and th
fields
and K
and 34
31 mob
rain

in the chlorides of the alkali and alkaline earth metals. IV. The ternary system of lithium, potassium, and calcium. V. V. Rovatéy (M. J. Londono) *Ind. Minér. Minéral. Chir. Nér. Kém.* 1934, 51, 831. The LiCl-KCl-CaCl₂ system was investigated by the visual, photothermal method of liquidus boundaries were determined. Potassium crystal were found: LiCl, KCl, CaCl₂. There were 2 ternary eutectics at 423°C. the eutectic LiCl 51.5, KCl 14.3 and mole % CaCl₂ 30.9; KC_l 43.2, and CaCl₂ 5.8 mole % CaCl₂ 30.9. J. Rovatéy, Tach

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825530002-6"

S/153/60/003/004/007/040/XX
B023/B054

AUTHORS: Plyushchev, V. Ye., Kovalev, F. V.

TITLE: Study of the Reaction of Alkali and Alkaline-earth Chlorides in Melts. V. Liquidus of the Ternary System Sodium Chloride - Potassium Chloride - Calcium Chloride

PERIODICAL: Izvestiya vyashikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 4,
pp. 575 - 579

TEXT: The authors studied the liquidus of the system $\text{NaCl} - \text{KCl} - \text{CaCl}_2$ by the visual-polythermic method under conditions similar to those of the previous paper (Ref.20). Sodium and potassium chlorides, type "chemically pure", were crystallized out of water, and carefully dried; anhydrous CaCl_2 was obtained by the method of Ref.20. Ten cross sections of the $\text{NaCl} - \text{KCl} - \text{CaCl}_2$ system were studied. The diagram of the cross sections is combined with the isothermal diagram of the liquidus surface

Card 1/4

Study of the Reaction of Alkali and S/153/60/003/004/007/040/XX
Alkaline-earth Chlorides in Melts. V. B023/B054
Liquidus of the Ternary System Sodium Chloride - Potassium Chloride -
Calcium Chloride.

(Fig.2). Experimental data are given in Tables 1 and 2. The authors state that four ranges of primary crystallization (NaCl , KCl , CaCl_2 , and compound $\text{KCl} \cdot \text{CaCl}_2$) are present in the system concerned. Two triple eutectics crystallize at 465°C (E_1) and 515°C (E_2), respectively. Their graphically determined and experimentally confirmed compositions in mole% are: NaCl : 42.75, KCl : 7.25, CaCl_2 : 50.0 (E_1), and NaCl : 31.5, KCl : 47.75, CaCl_2 : 20.75 (E_2). The solid solutions NaCl and KCl , which are characteristic of the $\text{NaCl} - \text{KCl}$ system, decompose in the system $\text{NaCl} - \text{KCl} - \text{CaCl}_2$ already near the liquidus surface. Therefore, the melting-point diagram for the given ternary system is different from the diagram plotted earlier for the binary system. There are 2 figures, 2 tables, and 21 references: 10 Soviet, 9 German, 1 French, and 1 British.

Card 2/4

Study of the Reaction of Alkali and Alkaline-earth Chlorides in Melts. V. Liquidus of the Ternary System Sodium Chloride - Potassium Chloride - Calcium Chloride

S/153/60/003/004/007/040/XX

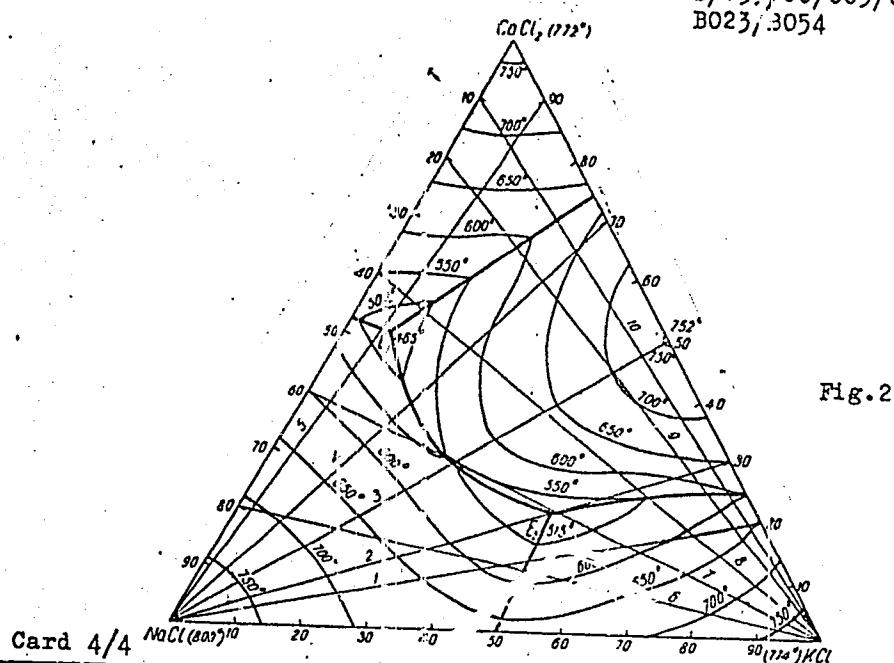
B023/3054

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova Kafedra tekhnologii redkikh i rasseyannykh elementov (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov, Department of Technology of Rare and Trace Elements)

SUBMITTED: July 21, 1958

Card 3/4

S/15?/60/003/004/007/040/xx
B023/.3054



KABO, L.D.; LI VIN, N.A., kand. sel'skokhoz. nauk; BELOUS, N.V.; VASILENKO,
L.D.; ZEYFERT, O.A.; KOVALEV, F.V.; TURULEV, V.K., aspirant

Sorgo as. a valuable crop. Zemledelie 27 no.4:52-61 Ap '65.
(MIRA 18:4)

1. Nachal'nik Upravleniya po kh i kormovykh kul'tur
Ministerstva proizvodstva i zagotovki sel'skokhozyaystvennykh
produktov Uzbekskoy SSR (for Kabo). 2. Ukrainskiy nauchno-
issledovatel'skiy institut oreshayemogo zemledeliya (for
Litvin, Belous, Vasilenko). 3. Vsesoyuznyy nauchno-issledovatel'-
skiy institut agrolesomelioratsii (for Zeyfert). 4. Donskoy
sel'skokhozyaystvennyy institut (for Kovalev, Turulev).

SOV/124-58-8-8734

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 55 (USSR)

AUTHOR: Kovalev, F.Ya.

TITLE: On the Flow Capacity of a Bottom Outlet (O propusknoy sposobnosti dor.nogo vodospuska)

PERIODICAL: Sb. stud. nauchn. rabot., Belorussk. politekhn. in-t, 1957,
Nr 3, pp 92-95

ABSTRACT: It is pointed out that the rate of flow through a bottom outlet is submerged in the tail water is not the same as the flow rate obtaining when the outlet is not submerged in the tail water, because the coefficient of resistance of the backwater will be different in the two cases. The author observes that the data obtained from his laboratory experiments with respect to unsubmerged outlets indicate that said coefficient may be taken as equal to unity, independently of the type of outlet exit involved (which accords with the recommendations in the literature). In the case of submerged outlets, however, the coefficient in question is dependent on the type of transition used between the outlet and the open channel. According to the author's experiments, when the outlet was submerged, the coefficient's

Card 1/2

SOV/124-58-8-8734

On the Flow Capacity of a Bottom Outlet

value ranged from 0.47 to 0.88. Included are experimental data on manipulation by means of gate valves of an outlet riser.

N.P. Rozanov

Card 2/2

KOVALEV, F.Ya.

Smooth regulation of short-circuited asynchronous motors by
superimposing two harmoniously rotating magnetic fields.
Trudy Ural. politekh. inst. no.106:64-75 "60. (MIRA 15:5)
(Electric motors, Induction)

CHERNOBAY, D.G.; KOVALEV, F.Ya., kand. tekhn. nauk, retsenzent;
DELYUKIN, L.N., inzh., red.; YELISEYEV, M.S., red.izd-va;
SMIRNOVA, G.V., tekhn. red.

[Electric control of the equipment in machinery plants]
Elektroavtomatika oborudovaniia mashinostroitel'nykh zavo-
dov. Moskva, Mashgiz, 1963. 205 p. (MIRA 16:10)
(Machinery industry) (Electric controllers)
(Electronic control)

AKIVEROV, I.N.; KOVAL'YEV, F.Ya.

Theoretical principles of the electric conductivity of concrete.
Dokl. AN BSSR 8 no.7:447-451 '64. (MIRA 17:10)

1. Institut stroitel'stva i arkhitektury Gosstroja BSSR.

KOVALEV, G.

"The 22d Congress of the CPSU and the problems of ideological work." Reviewed by G. Kovalev. Komm. Vooruzh. Sil 2 no.10:91-93 My '62. (MIA 15:5)
(Communist Party of the Soviet Union - Party work)

KOVALSKY, G. A.

Can't Tech Sci

Dissertation: "Increasing the Tear-Resistance
and Life of the Parts in Mine-Transport Machines
of Krivbas Mines."

18/5/54

Moscow Mining Inst imeni I. V. Stalin

SO Vecheryaya Moskva
Sum 71

KOVALEV, G.A.

Accounting at the Zoological Garden. Sbor. st. Mosk. zoop. no.2:
125-133 '58. (MIRA 11:12)
(Moscow--Zoological gardens--Accounting)

D'yAKONOV, Yu.S.; KOVALEV, G.A.

X-ray studies of halloysite from Tertiary sediments in Bashkiria.
Zap.Vses.min.oh-ya 92 no.2:227-230 '62. (MIRA 15:6)
(Bashkiria--Halloysite)
(X rays--Industrial applications)

KOVALEV, G.A.

X-ray determination of minerals. Rent.min.syr. no.1:16-23
'62. (MIRA 16:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.
(X-ray crystallography)

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825530002-6

KOVALEV, N. A.

35909. POLIVAKHINA, Yu. I. i KOVALEV, N. A. O prirode selikhanita mineral.
sbornik (I'vov), No. 3, 1949, S. 99-115--Biblio. p: 18 Nasv.

so: Letopis' Zhurnal'noj Stately, No. 49, 1949

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825530002-6"

KOVALEV, G.A.

USSR/ Physical Chemistry - Crystals

B-5

Abs Jour : Ref Zhur - Khimiya, 1957, No 3, 7275

Author : Kovalev, G.A.

Title : Radiographic Investigation of Ferromagnesia Chlorites

Orig Pub : Sb. Kristallografiya, Vol 5, Metallurgizdat, Moscow, 1956,
259-268

Abstract : X-ray methods (powder diffraction) have been used in the investigation of 16 ferromagnesia chlorites. The dependence of the changes in the parameters b and $c \sin \alpha$ on the composition has been established; this makes possible an analysis of the chlorides and the determination of their approximate composition. On the basis of the results from the radiographic analysis, it is proposed to classify ferromagnesia chlorides as one family without subdivision into two separate groups, ortho- and lepto-chlorides.

Card 1/1

- 42 -

Koval'ev, G. A.							
V. new: Koval'ev, I. Komkov (All-Union Geol. Research Inst., Len. Univ., 1966, 86, 6) Zabibki Yavkova, Mineral. Obshch. 8(1967). A natural CdS mineral was found assoc. w/ sphalerite (FeS ₂), pyrrhotite, amorphous S, chalcocite (Cu ₂ S), cassiterite, and pyrite as cementing constituent in sandstone. It is mostly fine cryst. below 0.1 mm. In diam., and tan inc. luster, black, powder black. Only the forms {100} and {001} are developed; it has perfect prismatic cleavage and is very brittle, similar to wurtzite. In polished section the mineral is somewhat brighter gray than sphalerite, in oil illumination it has a brownish tint and is weakly bl. extinction parallel to the cleavage. Microchem. reactions are poss. for Cd (but not for Zn), and for S and Se. The x-ray diagram corresponds to a structure of the wurtzite type; the mineral is a solid soln. of 15% CdS and 85% CdSe. W. E. 3							

KOVALEV, G.A.; D'YAKONOV, Yu.S.

X-ray study of kaolinitic clay minerals. Zap.Vses. min. ob-va 88
no. 4: 467-473 '59. (MIRA 12:11)
(Clay)

KOVALEV, G.A.; D'YAKONOV, Yu.S.

Structural characteristics of vermiculite-like minerals from
the Kola Peninsula. Zap. Vses. min. ob-va 89 no.4:458-460
'60. (MIRA 13:11)

(Kola Peninsula—Vermiculite)

1. N., V.N.; FOVALEV, G.A.; KUZNETSOVA, V.N.

Magnetite in peridotites, dunites, and serpentinites. Zap.
Vses. m.n. ob-na 93 no.3:339-342 '64.

(MIRA 18:3)

KOVALEV, G.D., inzh.

Calculation of the casings of explosionproof electrical equipment.
Vest. elektroprom. 3/ no.3:22-25 Mr '63. (MIRA 16:8)

(Electricity in mining--Safety measures)

MILAKOV, M.Ye., inzhener; BERKOVICH, M.A., inzhener; SEMENOV, V.A., inzhener;
ALEKSANDROV, I.N., inzhener; KOVALEV, G.F., inzhener; ARUTYUNIAN, N.B.,
inzhener.

Gas relay protection of power transformers. Elek.sta.27 no.6:41-45 Je
'56. (MIRA 9:9)

1.Gorenergo (for Milakov). 2.Mosenergo (for Semenov). 3. Belorussenergo
(for Aleksandrov). 4.Yarenergo (for Kovalev). 5.Armenenergo (for Aru-
tyunyan).

(Electric transformers)

MOVALEV, G.F.

Give only high-grade coal. Ugol' Ukr. 2 no.10:28-29 0 '58.
(MIRA 12:1)

1. Zamestitel' glavnogo inzhenera shakhty No.10-bis tresta
Snezhnyyanantratsit.

(Coal--Grading)

KOVALEV, G.F., inzh.

Concerning the displacement of the neutral line. Elek. sta. 33
no.6:59-62 Je '62. {MIRA 15:7}
(Electric power distribution) (Electric lines)

PETROV-SEMICHEV, Yu.A., inzh.; KOVALEV, G.G., inzh.

Important potentiality in road construction. Avt.dor. 26 no.10:
2-3 0 '63. (MIRA 16:11)

< KOVALEV, G.G. (Rostov-na-Donu)

Surgical treatment of cholelithiasis complicated by spontaneous
anastomosis of the gall bladder with the duodenum. Kaz.med.zhur. no.5:
113 S-0 '60. (MIRA 13:11.)

(CALCULI, BILIARY)
(GALL BLADDER)
(DUODENUM)

KOVALEV, G.G.

Coordinated work of the motors in continuous production lines
of the textile industry according to the G-D system. Izv.
yvs. ucheb. zav.; tekhn. tekst. prom. no.6:110-115 '64.

(MIRA 18:3)

1. Ivanovskiy tekstil'nyy institut imeni Frunze.

KOVALEV, G.G.

Case of sarcoma of the duodenum. Khirurgiia 36 no.4:126-127 Ap
'60.
(DUODENUM--TUMORS)

KOVALEV, G.G.

Electroencephalography as a method for determining the functional state of the cerebral cortex in thyrotoxicosis before and after surgical treatment. Khirurgiia 36 no. 5:63-69 My '60. (MIRA 14:1)
(ELECTROENCEPHALOGRAPHY) (CEREBRAL CORTEX)
(HYPERTHYROIDISM)

KOVALEV, G.G., Cand. Med. Sci., — (diss) "Data on the study of the functional changes in patients with thyrotoxicosis," Stalino, 1961, 15 pp (Stalino Medical Institute im A. M. Gorkiy), 220 copies (KL-Supp 9-61, 190)

(GUTNIKOV, B.Z., prof.; KUSAKOV, V.I., kand.med.nauk; PANCHENKO, G.S.,
kand.med.nauk; KOVALEV, G.G.; AKSENOV, A.I.; KHOPRYACHKOV, N.V.;
KOMBACHEKOV, A.Sh.)

Late results of treating patients with urethral strictures.
Urologiia no.6/45-51 '60. (MIRA 15:5)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. B.Z.
Gutnikov) Rostovskogo meditsinskogo instituta.
(URETHRA--STRICTURE)

PETROV, SEMICHEV, Yu.A., inzh.; KOVAL'EV, G.G., inzh.

Construction of beds and pavements of cement-reinforced soils
on the roads of the R.S.F.S.R. Avt. dor. 27 no. 73-7 JI '64.
(MIRA 17:12)

GORIN, A.A.; OSMACHKIN, B.P.; GOLENOK, L.S., inzh. po avtomatizatsii;
KOVALEV, G.I.; GOROBTSOV, V.S.

Isotopes in the service of miners. Ugol' Ukr. 9 no.12:14-16
D '65. (MIRA 19:1)

1. Ispolnyayushchiy obyazannosti direktora Donetskoy bazovoy izotopnoy laboratorii (for Gorin).
2. Nachal'nik uchastka izotopov Luganskoj montazhno-naladochnogo upravleniya (for Osmachkin).
3. Snekhtoupravleniye "Butovka" tresta Makeyevugol' (for Golenok).
4. Glavnyy inzh. laboratorii "Izotop" pri Luganskom montazhno-naladochnom upravlenii (for Gorobtsov).

KOVALEV, G.K., inzhener.

Mold measurements of ship hulls by means of optical instruments.
Rech. transp. 15 no.10:31-32 0 '56. (MLRA 10:2)

(Shipbuilding)
(Optical measurements)

KOVALEV, G. K.

KOVALEV, G. K.: "Material on the study of the toxicity of 'chlorten' and its therapeutic effect in sheep mange." All-Union Inst of Experimental Veterinary Medicine, Min Agriculture USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Veterinary Sciences.)

Knizhnay i letopis', No. 30, 1956. Moscow.

Kovalev, G. K.

USSR/Diseases in Farm Animals. Diseases caused by Arachno- R-2
Entoms.

Abs Jour: Ref Zhur-Biol., No 12, 1958, 54946.

Author : Kovalev, G. K.

Inst : All-Union Scientific Research Institute of Veterinary
Sanitation and Ectoparasitology.

Title : Acaricidic Properties and Therapeutic Value of Chlorten
in Sheep Scabies.

Orig Pub: Tr. Vses. n.-i. in-t vet. sanitarii i ektoparazitol.,
1957, 11, 205-211.

Abstract: A single administration of 1 percent water emulsion of
chlorten at 20-22° [C] and 30-60 seconds exposure
assured complete assanation of farms from sheep scabies
under experimental as well as industrial conditions.
The 1 percent chlorten water emulsion did not cause any
side effects, had a favorable effect on the skin, did
not soil the wool and did not alter its quality. Animal

Card : 1/2

Card : 2/2

KOVALEV, G.K., aspirant

Studying the toxicity and mode of action of chlorthen. Trudy
VNIIIVSE 12:4+-60 '57. (MIRA 11:12)

1. Laboratoriya profilaktiki i terapii ektoparazitarnykh
zabolevaniy sel'skokhozyaystvennykh zhivotnykh Vsesoyuznogo
nauchno-issledovatel'skogo instituta veterinarnoy sanitarii
i ektoparazitologii.

(Pyridine)

KOVALEV, G.K.

KOVALEV, G.K., aspirant.

Using chlorothene in scab disease in sheep. Veterinariia 34 no.2:
70-72 F '57. (MLRA 10:11)
(Pyridine) (Scab disease in sheep)

KOVALEV, G.K.

Treatment of experimental dysentery infection, induced by antibiotic-resistant strains of Flexner's dysentery bacteria, with the combination of antibiotics and a preparation stimulating immunogenesis. Antibiotiki 10 no.2:148-151 F '65.

(MIRA 1845)

1. Kafedra mikrobiologii (zav. - prof. S.I.Sherishorina) Saratovskogo meditsinskogo instituta.

KOVALEV, G.K.

Treatment of experimental dysenteric infection with a combination
of an antibiotic and immunogenesis-increasing preparation. Zhur.
mikrobiol., epid. i immun. 42 no.6:21-24 '65. (MIKA 18:9)

I. Saratovskiy meditsinskiy institut.

S/844/62/000/000/023/129
D244/D307

AUTHORS: Bugayenko, L. T. and Kovalev, G. M.

TITLE: Radiation-chemical conversions of the chlorite ion in aqueous solutions

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimi. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 149-154

TEXT: The dependence was studied of the yields of ClO_2 and ClO^- resulting from the conversion of chlorite ions on the concentration of sodium chlorite in neutral solutions saturated with O_2 , air and N_2 . NaClO_2 was chosen as an example of an autoconjugated acceptor capable of reacting with both H and OH radicals. The experiments were conducted at $<0^\circ\text{C}$, the radiation source being an x-ray tube operating at 70 kv. In most cases the dosage was 6×10^{15} ev/ml.sec. It was found that the formation of ClO_2 increased linearly. ✓

Card 1/ 3

S/844/62/000/000/023/129
D244/D307

Radiation-chemical conversions ...

early with the dosage up to 1.5×10^{18} ev/ml in solutions containing a range of concentrations of NaClO_2 (0.0033 - 2.04 M), showing that both ClO_2 and ClO^- do not react with H and OH. The yield of ClO_2 at first increases slowly and linearly with the concentration of NaClO_2 (up to 0.03 M) and then increases rapidly. The increase is explained to be due to the reaction of ClO_2^- with excited water molecules, post-radiation reactions and the direct action of the radiation on ClO_2^- . There is no chain reaction, changes in the radiation dosage from 9×10^{14} to 6×10^{15} ev/ml.sec not causing changes in the yields of ClO_2 . In the presence of O_2 (various concentrations) and NaClO_2 the initial portions of the curves for the formation of ClO_2 are all linear, the yields $G(\text{ClO}_2)$, ranging from 2.8 to 8.7 mole/100 ev. Also $G(\text{ClO}_2)$ did not depend on the dosage strength from 7.1×10^{15} to 6.4×10^{15} . The results show that the

Card 2/3

Kovalev G.N.

187500

81903

S/126/60/010/01/005/019
E111/E335AUTHORS: Geguzin, Ya.Ye., Kovalev, G.N. and Ratner, A.M.

TITLE: Investigation of Certain Physical Processes Taking Place on the Surface of Crystalline Bodies at High Temperature. VI. Method of Determining Coefficients of Surface Self- and Hetero-diffusion in Crystalline Bodies

PERIODICAL: Fizika metallov it metallocovedeniye, 1960, Vol.10, No.1, pp 47 - 57

TEXT: The authors point out that comparatively little information is available on diffusion on surfaces. They describe their work to develop a method for determining the surface-diffusion coefficient and the thickness of the layer in which such diffusion occurs. The latter has been found to be thicker (Ref.3) than indicated by calculations where Fisher's model (Ref.1) was used. In their method many plates (about 100 microns thick) are made into a pack, along one polished surface of which (perpendicular to the plates) a radioactive isotope of the diffusing element is deposited (Fig.1a). There is little direct contact between

Card 1/4

81903

S/126/60/010/01/005/019
E111/E335

Investigation of Certain Physical Processes Taking Place on the Surface of Crystalline Bodies at High Temperature. VI. Method of Determining Coefficients of Surface Self- and Hetero-diffusion in Crystalline Bodies

plates. Diffusion occurs both within a plate and along its gap-adjacent surfaces, and also from the latter into the plate: a characteristic distribution is obtained (Fig.1b). From this, with equations developed by the authors, the self- and hetero-diffusion coefficients can be calculated, using a simplified representation (Fig.2); graphical methods can be used (Figs.3 and 4) for calculation. The authors go on to discuss the possible role of gaseous diffusion, showing that with their size of interplate gap this cannot be significant: the critical gap width is given by the square root of the product of the surface-diffusion coefficient and the life of an atom on the wall surface. This conclusion was verified by a special series of experiments in which iron strips were arranged between two plates, one covered

with a layer of ^{59}Fe . Two sizes of gap were arranged between strips (Fig.5). Radioactivity of the plates was determined,

Card 2/4

✓

81903

S/126/60/010/01/005/019
E111/E335

Investigation on Certain Physical Processes Taking Place on the Surface of Crystalline Bodies at High Temperature. VI. Method of Determining Coefficients of Surface Self- and Hetero-diffusion in Crystalline Bodies

excluding surface diffusion, after annealing at 680 °C. The authors report preliminary determinations of surface self-diffusion in alpha iron. Armco-iron strips 9×10^{-3} cm thick, 3×10^{-1} cm wide, were studied by the pack technique, diffusion annealing being effected in oxygen-free argon at 550, 600, 640, 650 and 680 °C. Fig. 6 shows an autoradiograph of a specimen and Fig. 7a the distribution of radioactivity with distance from specimen edge. Fig. 7b give plots of functions derived from Fig. 7a. Data relating to surface diffusion in alpha-iron are tabulated and the logarithm of the surface-diffusion coefficient is shown (Fig. 8) to be linearly related to the reciprocal of absolute temperature. The surface-adjacent layer in which surface diffusion takes place was found to be several hundred atom layers thick: no explanation is available of the existence *X*

Card 3/4

L 1800-63

EMP(q)/EM(m)/BDS AEETC/ASD JD

S/0181/63/005/006/1687/1696

ACCESSION NR: AP3001292

57

55

14

AUTHORS: Geguzin, Ya. Ye., Kovalev, G. N.

TITLE: Investigation of diffusion on the surface of polycrystalline metals

SOURCE: Fizika tverdogo tela, v. 5, no. 6, 1963, 1687-1696

TOPIC TAGS: surface diffusion, Ag, Ni, Au, dislocation, oxidation-reduction,
"laminated sample", vacancy

ABSTRACT: The authors have made use of a method previously advanced by them (Ya. Ye. Geguzin, G. N. Kovalev, and A. M. Ratner, FMM, 10, 1, 1960)--the "laminated sample" method--to investigate surface diffusion in the systems Ag*-Ag, Ag*-Ni, and Ag*-Au (the asterisks representing the diffusing component). The coefficients of surface diffusion they obtained are shown in the following expressions:

$$D_{\text{Ag}^*-\text{Ag}} = 0.3 \exp\left(\frac{-11800}{RT}\right).$$

$$D_{\text{Ag}^*-\text{Ni}} = 22.4 \exp\left(\frac{-16000}{RT}\right).$$

The authors determined the thickness of the surface layer in which diffusion takes place to be on the order of 10-20 atomic layers. They discuss several possible
Card 1/2

L 18001-63

ACCESSION NR: AP3001292

causes of this surface diffusion, discarding most explanations, but they consider more likely the possibility of pinned dislocations. In the layer, the diffusion mobility of atoms being increased along these defects. They also suggest that the layer may exhibit an increase in vacancy concentration because of oxidation-reduction processes on the surface of the metal. An analogy with surface diffusion in liquids is drawn, but the limitation of analogies is stressed. Orig. art. has: 7 figures, 3 tables, and 10 footnotes.

2

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University)

SUBMITTED: 15Nov62

DATE ACO: 01Jul63

ENCL: 00

SUB CODE: PH

NC REF Sov: (007

OTHER: 007

Card 2/2

L 16967-63

EWP(q)/E(T(n)/BUS S/030/63/149/006/007/027

57

AFFTC/ASD JD

AUTHOR: Geguzin, Ya. Ye., and Kovalev, G. N.TITLE: Self-diffusion at the surface of polycrystalline silver 17PERIODICAL: Akademiya nauk UkrSSR. Doklady. v. 119, no. 6, 1963, 1290-1292

TEXT: The authors investigated the diffusion of atoms at the surface of a solid on the basis of the surface self-diffusion of silver, by using the "layered specimen" method. This method makes it possible, when determining the coefficient of surface diffusion D_s , to take into account the loss of the diffusing component from the surface of the specimen into space and to evaluate the thickness of the surface layer δ_s in which this process takes place. The "layered specimen" method consists taking foil sheets of the metal whose surface diffusion is to be investigated and assembling them into a packet in which the individual sheets are in contact only at certain points of natural roughness of the surface. The packet is exposed to a radioactive isotope at a straight angle to the plane of the foil sheets, and subsequently the sheets are analyzed for the concentration (activity) of the diffused isotope as a function of distance x from the starting plane $\ln \bar{C} = \varphi(x^{4/3})$. Quantitative results of the investigation are presented. There are 2 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy institut im. A. M. Gor'kogo; Ukrainskiy institut metallov (Khar'kov State University imeni A. M. Gor'koy; Ukrainian Institute of Metals)

SUBMITTED: October 29, 1962

Card 1/1

GEGUZIN, Ya.Ye.; KOVALEV, G.N.; OVCHARENKO, N.N.

Studying self-diffusion in the surface layer of gold by the "mass transfer"
and radioisotope methods. Fiz. tver. tela 5 no.12;3580-3589 D '63.
(MIRA 17:2)

1. Khar'kovskiy gosudarstvennyj universitet i Ukrainskiy institut metallov.

GOL'DIN, M.L.; KRIVONOSOV, Yu.I.; DOLZHENKOV, P.Ye.; TOBOL'SKIY, M.B.;
KOVALEV, G.N.

Use of autoradiography in studying the boundary zone in bimetals.
Zav. lab. 31 no.2:202-203 '65. (MIRA 18L7)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov.

ACC NR: AP7002580

(A,N)

SOURCE CODE: UR/0413/66/000/023/0077/0077

INVENTORS: Anisimova, L. I.; Bornshteyn, G. L.; Gutokin, V. M.; Potov, P. A.; Karapotov, K. K.; Kovalev, G. N.; Rapoport, M. B.; Spanibukhov, O. I.

ORG: none

TITLE: Device for converting seismograms into variable height recordings. Class 42,
No. 189165

SOURCE: Izobratoeniya, preryshlennyye obrastay, tovarnyye znaki, no. 23, 1966, 77

TOPIC TAGS: seismograph, seismologic instrument

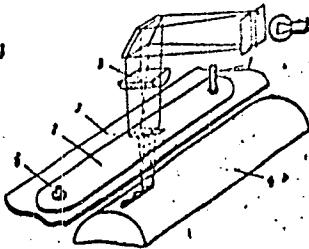
ABSTRACT: This Author Certificate presents a device for converting seismograms into variable height recordings, which contains a pantograph, an illuminator, and a photodrum. To increase the rate of processing seismograms, a drive pin coupled with a movable screen is mounted in the pencil socket of the pantograph (see Fig. 1). The illuminator and a rod which is the axle of rotation of the movable screen are mounted on a plate which can be moved along the generatrix of the photodrum.

UDC: 550.340.8

Card 1/2

ACC NR: AP7002580

Fig. 1. 1 - drive pin; 2 - movable screen;
3 - plate; 4 - photodrum; 5 - illuminator;
6 - rod



Orig. art. has: 1 diagram.

SUB CODE: 08/ SUBM DATE: 10Mar65

Card 2/2

KOVALEV, Gavriil Nikiforovich; SHEBUNYAYEV, Grigoriy Fedotovich;
MAKAROVA, E.A., red.; KUROBOVA, N.D., tekhn. red.

[Wages in the building materials industry] Oplata truda v pro-
myshlennosti stroitel'nykh materialov. Moskva, Profizdat, 1962.
158 p. (MIRA 16:1)

(Wages--Building materials industry)

KOVALEV, Gavriil Nikiforovich; SHCHERUNYAYEV, M.

[Wages at plants of the cement, reinforced concrete, and asbestos-cement industry] Oplata truda na predpriyatiakh tsementnoi, zhelezobetonnoi i asbestotsementnoi promyshlennosti. Moskva, Izd-vo VTS SPS, 1961. 151 p.

(Wages--Building materials industry) (MIRA 15:9)

KOVALEV, G.N.; RABBE, G.; MALBANDYAN, R.M.; GURMAN, V.S.; SERGEYEV, G.B.

High-speed photochemical hydrobromination of ethylene and propylene at low temperatures. Dokl. AN SSSR 142 no.2:396-398 Ja '62. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavлено академиком N.N.Semenovym.

(Ethylene)

(Propene)

(Hydrobromic acid)

KOVALEV, G.N.; SERGEYEV, G.B.

Some features of the photochemical chain reaction in frozen
mixtures of hydrogen bromide with ethylene. Dokl. AN SSSR
160 no.2:390-393 Ja '65. (MIR. 18:2)

1. Moskovskiy gosudarstvennyy universitet. Submitted July 11,
1964.

KOVALEV, G.N.; MASTEROVA, M.M.; SERGEYEV, G.B.

Photochemical reaction of hydrobromination in vitreous and
crystalline mixtures of allyl chloride and hydrogen bromide.
Dokl. AN SSSR 165 no.2:351-353 N '65. (MIRA 18:11)

1. Moskovskiy gosudarstvennyy universitet. Submitted April 13,
1965.

NEYEVIN, Ye.A.; KOVALEV, G.N.; LEVINA, F.M., red.; TYAPKIN, B.G., red.
izd-va; GILENSEN, P.G., tekhn.red.

[Construction industry on the road to further technical progress;
aid for lecturers] Stroitel'stvo na puti tekhnicheskogo progressa;
v pomoshch' dokladchikam i lektoram. Moskva, Gos.izd-vo lit-ry
po stroit., arkhit. i stroit.materialam, 1959. 58 p. (MIRA 13:1)

(Construction industry)

L 33528-65 EWT(m)/EWA(d)/T/I P(t)/EWP(h)/EWA(c) TJP(c) MJW/JD
ACCESSION NR: AP5005477 S/0032/65/031/002/0202/0203

AUTHORS: Gol'din, M. L.; Krivorosov, V. I.; Kovalev, G. N.; Dolzhenkov, F. Ya.;
Tobolskiy, N. B.

TITLE: Use of the autoradiographic method for the study of boundary zones in B
bimetals 4

SOURCE: Zavodskaya laboratoriya, v. 31, no. 2, 1965, 202-203

TOPIC: JAIS: autoradiography, titanium, steel alloy/ Kh18N9T steel, 59 iron,
carbon, St.3 steel, MK NIKE film

ABSTRACT: The autoradiographic method was used for investigating the transition region in alloys of steel St.3 observing the behavior of Fe⁵⁹ into the specimens by applying melting St.3 and steel Kh18N9T was deposited electrolytically by cathodization in a mixture of specific activity of ingots were obtained by laminating. The method was used for investigating the transition region in alloys of steel St.3 with Kh18N9T by C¹⁴. The radioactive isotopes were introduced films about 1 μ thick to the surface, and also with added radioactive isotopes. Radioactive iron while surface saturation with C¹⁴ was accomplished activated charcoal and barium carbonate. The found to be 4 to 12 mCi/kg. Bimetallic strips polished, degreased ground surfaces were coated with

L13520-65	ACCESSION NR: AP5005477	<p>Zircon and brought into contact with NIKKI photographic film of type M and exposed for 10 to 30 days at 2 to 5°C. For the St.3/Kh18N9T pair, the comparison of the microstructure with the autoradiograms shows the amount of re-mobilizations in the St.3-Kh18N9T pair. The Ti/steel pair shows a boundary of several strata whose thicknesses and structures depend on the temperature and pressure during laminations. Orig. art. has 4 radiographs.</p> <p>ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut metallov (Ukrainian Scientific Research Institute of Metals)</p>			
SUBMIT ID: 00		EXCL: 00		SUB CODE: OC/MM	
NO REP SOV: 001		OTHER: 000			
C: d 2/2					

S/137/62/000/001/119/237
A052/A101

AUTHORS: Palatkin, L. S., Kovalev, G. N.

TITLE: X-ray investigation of alloys of some metals with sulfur

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 4, abstract 1122
(Uch zap. Khar'kovsk. un-t, 110, Tr. Khim. fak. i N.-i. in-ta
khimii KMGU, 17, 109 - 120)

TEXT: Alloys of Ag, Cu, Cd, Zn, In, Pb, Sn, Ge, Bi and Sb with S prepared by the method of Academician S. A. Vekshinskii were investigated. As initial materials were taken Ag (99.92%), Sn (99.94%), Cu (99.97%), Pb (99.99%), Bi, Zn and Cd of (ch.d.a.) grade, Sb (99.2%), In (99.98%), Ge (99.9%) and stick sulfur after a 4-fold vacuum distillation. The investigation was carried out by X-ray method and with radioactive isotopes (S^{35}). A relatively stable vitreous state was established in Cu-S (65 - 80% S), Ag-S (70 - 90% S), Sn-S (75 - 85% S), Pb-S (75 - 85% S), Bi-S (70 - 80% S), Zn-S (45 - 70% S), Cd-S (40 - 70% S), In-S (25 - 80% S), Ge-S (15 - 60% S), Sb-S (5 - 90% S) alloys. It is pointed out that the range of S concentration, within which the vitreous state is stable, extends with the increased ability of metal to stay in amorphous state. Diagrams of meta-

Card 1/2

L 5600 PK-4 ACROSS OT NR:	5 EWT(d)/EWP(v)/EEC-1/T/EWP(1)/EWP(5)/BED-2/EWD(1) I(P-c) BB/GG AR5014014	Pg-4/Pf-4/Pg-4/ UR/0372/63/000/004/0001/0002 62-306(047)	
SOURCE:	Ref. zh. Kibernetika. Sverdovskiy tom, Abz. 469		76 9
AUTHOR:	Koval'ev, G. N.; Rastrikin, I. A.; Petryayev, Yu. P.		
TITLE:	Some problems in chemical cybernetics 10		
ORIGINAL SOURCE:	USSR. LatvSSR. Riga. 1964. No. 3/1964. 1/3-19		
TOPIC CODE:	chemical process characteristic; automatic process control; regulation		
TRANSLATION:	The report evaluates the characteristics of chemical processes, i.e., complexity, lack of adequate mathematical description, multicomponent character, high noise factor, difficulty of observation, nearly total lack of adequately reliable chemical sensors, and great inertia. A basic plan is drawn for automatic and semiautomatic control of chemical processes. The control problem is formulated mathematically. Bibl. with 47 titles; 5 illustrations. B. G.		
SUB CODE:	IE, GC		
Card	11		

DEMIDOV, N.V., kand.veterinarnykh nauk; DERIPASKO, P.G., veterinarnyy vrach;
KOVALEV, G.V., veterinariannyy vrach

Application of difluorotetrachlorcethane in cattle fascioliasis.
Trudy VIGIS 6:216-220 '59. (MJFA 15:5)

1. Groznenskoye oblastnoye upravleniye sel'skogo khozyaystva.
(Liver flukes) (Parasites--Cattle)
(Anthelmintics)

USSR/Medicine - Pharmacology
Kovalev, G. V.
Card 1/1 Pub. 38-17/18

FD-1918

Author : Zakusov, V. V.; Kovalev, G. V.

Title : Mikhail Petrovich Nikolayev (Commemorating Fifth Year Since His Death)
(necrology)

Periodical : Farm. i. toks., 17, 59-60, Nov/Dec 1954

Abstract : Describes life and work of M. P. Nikolayev, an outstanding USSR pharmacologist and toxicologist who was active in establishing the journal "Farmakologiya i Toksikologiya".

Institution:

Submitted :

"APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825530002-6

KOVALEV, G.V.

V.I.Lenin prize to N.P.Kravkov; materials on the biography of
N.P.Kravkov. Farm. i toks. 19 no.2:53 Mr-Ap '56. (MLRA 9:7)
(KRAVKOV, NIKOLAI PAVLOVICH, 1865-1924)

APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R000825530002-6"

PROVOROV, G.V., and I.M. Seltsevich, "Effect of hypobaric and
hypoxia on hypoxia," Sov. Journ. of Physiol. (Physiology and Biophysics),
Vol. 1, No. 1, p. 103, 1956.

-168-

KOVALEV, G.V.

Toxicity of analgesics in hypothermia [with summary in English].
Farm. i toks. 21 no.4:23-27 Jl-Ag '58 (MIRA 11:11)

1. Kafedra farmakologii 1-go Leningradskogo meditsinskogo
instituta imeni akad. I.P. Pavlova (nauchnyy rukovoditel' -
deystvitel'nyy chlen AMN SSSR prof. V.V. Zakusov).
(ANALGESICS, toxicity,

in exper. hypothermia (Rus))

(HYPOTHERMIA, experimental

tox. of analgesics in (Rus))

KOVALEV, G. V.

COUNTRY : USSR V
 CATEGORY : Pharmacology and Toxicology. Analgesics
 ABS. JOUR. : RZhBiol., №. 5 1959, №. 23011
 AUTHOR : Kovalev, G. V.
 INST. :
 TITLE : Toxicity of Analgesics in Hypothermia
 ORIG. PUB. : Farmakol. i toksikologiya, 1958, 21, No 4, 23-27
 ABSTRACT : In experiments on nonanesthetized and anesthetized mice, subjected to low temperatures, it was shown that the toxicity of morphine, thecodine, promedol and phenadon at different body temperatures ($36-38^{\circ}$, $30-32^{\circ}$, $22-25^{\circ}$) decreases parallelly to the fall of temperature.

Card: 1/1

5

KOVALEV, G. V. APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825530002-6"

Effect of analgesic substances on reflexes from the pericardium and from the region of the radix pulmonis in hypothermia. Biul.eksp.biol. i med. 48 no.10:49-52 O '59. (MIRA 13:2)

1. Iz kafedry farmakologii (nauchnyy rukovoditel' - deystviteľ'nyy chlen AMN SSSR V.V. Zakusov) I Leningradskogo meditsinskogo instituta imeni I.P. Pavlova. Predstavlena deystviteľ'nym chlenom AMN SSSR V.V. Zakusovym.

(ANALGESICS AND ANTI PYRETICS pharmacol.)
 (PERICARDIUM physiol.)

(LUNGS physiol.)

(HYPOTHERMIA INDUCED)

(BLOOD PRESSURE physiol.)

IVANOVA, Z.N.; KOVALEV, G.V.; SPALVA, Ye.A.; KHAUNINA, R.A.; SHAPOVALOV, A.I.

Effect of a lytic cocktail on various phenomena of nervous activity;
experimental study. Vest.khir. 83 no.10:101-108 O '59.

(MIRA 13:2)

1. Iz kafedry farmakologii (ispolnyayushchiy obyazannosti zavedu-
yushchego - dotsent M.I. Pal'chevskaya) 1-go Leningradskogo meditsin-
skogo instituta prof. I.P. Pavlova. Adres avtorov: Leningrad, ul. L.
Tolstogo, d.6/8, 1-y Meditsinskiy institut, kafedra farmakologii.

(HIBERNATION, ARTIFICIAL pharmacol.)
(CENTRAL NERVOUS SYSTEM pharmacol.)

VAL'DMAN, A.V.; IVANOVA, Z.N.; KOVALEV, G.V.; LEBEDEV, V.P.; SHAPOVALOV, A.I.

Effect of aminazine on the ascending and descending functions of the reticular formation. Fiziol. zhur. 47 no.7:852-862 Jl '61.

(MIRA 15:1)

1. From the Department of Pharmacology, I.P.Pavlov Medical Institute, Leningrad.

(CHLORPACMAZINE) (BRAIN INNERVATION)

VAL'DMAN, A.V., prof., red.; KOVALEV, G.V., otd. red.

[Current problems in the pharmacology of the reticular formation and synaptic transmission] Aktual'nye problemy farmakologii retikuliarnoi formatsii i sinapticheskoi perechasti; sbornik trudov. Pod red. A.V.Val'dmana. Leningrad, 1963. 414 p. (MIRA 16:7)

1. Leningrad. Pervyy Leningradskiy meditsinskiy institut. Kafedra farmakologii. Pervyy Leningradskiy meditsinskiy institut, Leningrad (for Val'dman).
(NEUROPSYCHOPHARMACOLOGY)

L 45388-15	EWT(1)/EMT(m)/EPF(c)	EEC(t)/T/EWA(m)-2	Pj-4	I.P.(c)	W/53	
ACCESSION NR.	AP5010913				UR/0286/65/000/007/0129/0129	
AUTHORS:	Skripko, A. I.; Korg, V. S.; Kovalev, G. V.					23
TITLE:	Proton resonance hygrometer. Class M2, No. 169871					22
SOURCE:	Byulleten' izobretaniy i tovarknykh znakov, No. ?, 1965, 129					5
TOPIC CODES:	moisture measurement; proton resonance					4
<p>ABSTRACT: This Author Certifies that presents a proton resonance hygrometer containing a permanent magnet, a narrow-band amplifiers tuned to the NMR signal, and pointer type instruments, the operating circuit includes a scale and a high-Q regenerative generator. The generator scale is introduced into the circuit, the detector with change of the amplitude bridge, two tuned amplifiers are connected at the inputs of the comparison circuit (see Fig. 1) in the voltage circuit of the</p> <p>Cord 1/4</p> <p>which maintains the constant operation of the system. To decrease the inherent noise in the system, the two amplifiers are connected at the inputs of the comparison circuit (see Fig. 1) in the voltage circuit of the</p>						

L 45388-6			
ACCESSION NR: AP501C943			
the balance unit circuit. Orig. art. has: 1 diagram.			
ASSOCIATION: Institut avtomatiki, AN Kirgizskoy SSR (Institute of Automation, AN Kirgizia SSR)			
SUBMITTED: 30Dec63	INSL: 01	SUB CODE: MT, NP	
NO REF SCV: 000	OTHER: 000		
Card: 2/3			

L 45386-68

ACCESSION NR.: AP5010943

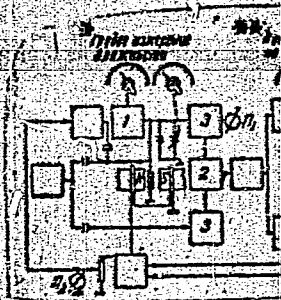


Fig. 1. Proton resonance hygrometer

1- high-Q regenerator; 2- comparison circuitry;
3- amplifier

ENCLOSURE: 61

- * Coarse moisture measurement
- ** Correction for weight
- *** Accurate moisture measurement

Car 3/1

DERIPASKO, P.G.; KOVALEV, G.V., veterinarnyy vrach; GRIGOR'YEV, N.Kh.

Reducing echinococcus in sheep. Veterinarija 42 no.9:45-46
(MIRA 18:11)
S '65.

1. Nachal'nik veterinarnogo otdela Nauchno-issledovatel'skoy veterinarnoy stantsii Checheno-Ingushskoy ASSR (for Deripasko). 2. Veterinarnyy otdel Nauchno-issledovatel'skoy veterinarnoy stantsii Checheno-Ingushskoy ASSR (for Kovalev). 3. Zaveduyushchiy otdelom parazitologii Nauchno-issledovatel'skoy veterinarnoy stantsii Checheno-Ingushskoy ASSR (for Grigor'yev).

AUTHOR: Kovalev, G.Ye., Engineer SOV/118-58-2-11/19

TITLE: The Hand Operated Coal Saw PUR-1 (Ruchnaya ugol'naya pila PUR-1)

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 2, p 29 (USSR)

ABSTRACT: A hand operated pneumatic coal saw PUR-1 was devised by the Voroshilovgradskaya gruppa instituta Dongiprouglemash (the Voroshilovgrad Group of the Dongiprouglemash Institute), constructed at the Krasn'luchskiy mashinostroitel'nyy zavod (the Krasnyy Luch Machine Building Plant) and tested at the Shakhta Nr 1 imeni XIX s"yezda KPSS tresta Leninugol' (the Mine Nr 1 imeni 19th Conference of the KPSS of the Leninugol' Trust). The use of this saw is intended to speed up the cutting of corners in the stopes of coal seams of a steep deep angle and more than 0.5 m thick. The saw consists of a pneumatic motor of 1.5-2 hp, a reducing gear and a cutting edge. Its total length is 865 mm, its width is 295 mm and its weight is 16.4 kg. It increases the workers' output by 50-60 %. There is 1 photo.

1. Cutting tools--Operation 2. Cutting tools--Performance

Card 1/1

GOLUBEV, M.I., inzh.; KOVALEV, G.Ye., inzh.

Underground loading points in coal mines. Izobr. i rats.
no. 6:29-31 Je '58. (MIRA 11:9)
(Coal handling)

KOVALEV, G.Ye., gornyy inzh.; REMENNIK, I.A., gornyy inzh.;
LATUGIN, G.M., gornyy inzh.

Mine testing of the KM-87 machinery unit. Ugol' Ukr. no.6:29-30
Je '61. (MIRA 14:7)

1. Trest Voroshilovugol'.
(Coal mining machinery--Testing)

KOVALEV, G.Ye., gornyy inzh.; PANARIN, I.A., gornyy inzh.; LAGUTIN, G.M.,
gornyy inzh.

Economic effectiveness of using around-the-clock combined brigades
in the organization of mining operations. Ugol' Ukr. 6 no.9:39
S '62. (MIRA 15:9)

1. Normativno-issledovatel'skaya stantsiya tresta Kommunarskugol'.
(Coal mines and mining)

KOVALEV, G.Ye., inzh.; PANARIN, I.A., inzh.; LAGUTIN, G.M., inzh.

Economic efficiency of multishift operation. Ugol'. prom. no.6:11-16
(MIRA 16:2)
N-D '62.

1. Trest "Kommunarskugol".
(Lugansk region—Coal mines and mining—Labor productivity)

KOVALEV, G.Ye.

Time study as a means of improving production processes. Ugol'
Ukr. 7 no.6:41-42 Je '63. (MIRA 16:8)

1. Normativno-issledovatel'skaya stantsiya tresta Komunarskugol'.

KOVALEV, G.Ye.; LYGIN, A.N.

Organization of work in a longwall during high rates of advancement. Ugol' 38 no.3:50-52 Mr '63. (MIRA 18:3)

1. Normativno-issledovatel'skaya stantsiya tresta Kommunarskugol'.

KOVALEV, I., inzhener

Restoration of automobile spline shafts. Avt. transp. 33
no. 4:26-28 Ap '55. (MIRA 8:7)
(Automobiles--Repairing)

KOVALEV, I.

KOVALEV, I.

Important sector of production. Sov. profsoiuzy 2 no. 6:43-45
Je '54. (MLRA 7:7)

1. Predsedatel' komiteta profsoyuza Novomoskovskogo zheste-
katal'nogo zavoda (Dnepropetrovskaya oblast')
(Tinware)

KOVALEV, I.

KOVALEV, I.

Improving the operational properties of type "Razin" tugboats.
Mor. flot 18 no.2:18-20 F '58. (MIRA 11:2)

1. Starshiy inzhener sluzhby sudovogo khozyaystva parokhodstva
Reydtanker.
(Tugboats)

KOVALEV, I.; KATKOV, N.; KARPUSHIN, A.

Reply to M.S.Neiman's article "Radio engineering courses." Izv.
vys. ucheb. zav.; radiotekh. 3 no.4:523 Jl-Ag '60. (MIRA 13:10)

1. Kafedra teoreticheskikh osnov elektrotekhniki Ryazanskogo
radiotekhnicheskogo instituta.
(Radio--Study and teaching)

ISTATKOV, St., kand. na tekhn. nauki inzh.; KOVAL'OV, I. [Kovalev, I.],
kand. na tekhn. nauki inzh. (Moskva)

Systems of the mass breaking of ores without compensation space.
Min delo 18 no. 3:7-10 '63.

1. Minno-geologhki institut, Sofia.

KOVALEV, I., inzh.-tekhnolog

Device for piroshki frying. Obshchestv. pit. no.6:35 Je. '63.
(MIRA 16:12)

1. Zaveduyushchiy proizvodstvom stolovoy No.6 tresta stolovykh
Oktyabr'skogo rayona Moskvy.

ARKHANGEL'SKIY, Yu.; KOVALEV, I.

Start of the first atomic power plant operating an "organic" reactor.
Atom. energ. 15 no.5:443 N '63. (MIRA 16:12)

KOVALEV, Il'ya Antonovich, istorik, krayeved; PURISHEV, Ivan Borisovich,
arkhitektor; MURASHEV, G.A., red.; KRASULINA, T.N., tekhn. red.

[A guide to the historical sites and architectural monuments of
Uglich] Uglich; putevoditel' po istoricheskim mestam i arkhi-
tekturnym pamiatnikam. IAroslavl', IAroslavskoe knizhnoe izd-vo
1960. 201 p. (MIRA 14:7)

(Uglich—Description)

5(2)

AUTHORS: Yegorov, N. P., Kovalev, I. A.

SOV/75-14-4-21/30

TITLE:

Determination of Alkali Metals by a Spectroscopic Method

PERIODICAL:

Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 489-490
(USSR)

ABSTRACT:

The authors described in an earlier paper (Ref 1) the spectroscopic determination of the concentration ratio of c_{Na}/c_K based on the lines Na 3302.3 and K 4044.1. When the sum of the two elements is known the concentrations of sodium and potassium can be computed from it. The present paper describes a spectroscopic method of determining sodium and potassium in solution in those cases where the sum of the two elements is unknown. The determination of the ratio c_{Na}/c_K was made - as was done in earlier investigations - by exciting the spectra in a current between copper electrodes which were wetted with the solution to be analysed. As analytical pairs of lines for sodium the pair Na 3302.3 - Cu 3290.5, and for potassium the pair K 4044.1 - Cu 4022.7 was taken. The concentration ratio c_{Na}/c_K can be

Card 1/4

Determination of Alkali Metals by a Spectroscopic
Method

SOV/75-14-4-21/30

computed on the basis of the equation obtained earlier:

$$S_{Na} - k \cdot S_K = \gamma_{Na} b \log \left(\frac{c_{Na}}{c_K} \right) + \gamma_{Na} \log a \text{ in which the coefficient}$$

$$k = \frac{\gamma_{Na}}{\gamma_K} \cdot r \text{ depends on the contrast factors for the lines of}$$

sodium and potassium, and on the coefficient r for the inhomogeneity of the photographic plate. If the solution of a pure sodium salt or a pure potassium salt is added to the sample solution the ratio of the concentration is changed. If the added quantity of sodium- or potassium salt is known, the sodium and potassium contents of the sample can be computed from the change of the concentration. The spectra have to be photographed twice for the determination: for the determination of the concentration ratio of the initial solution c_{Na}/c_K and for the determination in the solution after the addition of the corresponding salts. For the determination of the sodium content in the sample

Card 2/4

Determination of Alkali Metals by a Spectroscopic
Method

SOV/75-14-4-21/30

the formula $Na = \frac{Na_1}{b/a-1}$ is used (Na_1 = amount of the added sodium salt;

$b = \frac{Na + Na_1}{K}$; $a = \frac{Na}{K}$). The computation of the potassium

content is made analogously according to formula: $K = \frac{K_1}{a/d-1}$ ($d = \frac{Na}{K + K_1}$). For testing this method several artificial

mixtures were analysed by this method. The results are given in a table. The accuracy of the determination is: for sodium approximately 4%, for potassium approximately 2% (relative). The relatively high accuracy of the spectroscopic determination, even though there is a considerable distance between the analytical lines, is caused by the identical physical and physico-chemical

Card 3/4

Determination of Alkali Metals by a Spectroscopic
Method

SOV/75-14-4-21/30

properties of the sodium and potassium salts. Third components
have no influence on the results of the developed determination
method (Ref 2). There are 1 figure, 1 table, and 2 Soviet
references.

ASSOCIATION: Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy
promyshlennosti, Moskva (All-Union Institute of Correspondence
Instruction of the Textile and Light Industry, Moscow)

SUBMITTED: February 28, 1958

Card 4/4

KOVALEV, I. A. Cand Tech Sci -- (diss) "Investigation of the Elements
of a graded excavation System Under Conditions of the Zyryanovsk
Polymetal Deposits," Moscow, 1960, 16 pp, 200 copies (Krasnodar Institute
of Non-ferrous Metallurgy im M. I. Kalinin) (KL, 47/60, 103)

KOVALEV, I.A.; ZHIGLOV, Yu.S.

Spectral determination of traces of silicon in sodium iodide. Zav.lab.
29 no.2:179 '63. (MIRA 16:5)

1. Khar'kovskiy filial Vsesoyuznogo nauchno-issledovatel'skogo
instituta khimicheskikh reaktivov.
(Sodium iodide) (Silicon-Spectra)

KOVALEV, I.A.

Determination of the specific heats of dissolved substances according
to solubility. Izv.Sekt.fiz-khim.anal. 24:33-42 '54. (MIRA 8:4)

1. Khar'kovskiy filial Nauchno-issledovatel'skogo instituta khimi-
cheskogo mashinostroyeniya.
(Specific heat) (Solubility)

